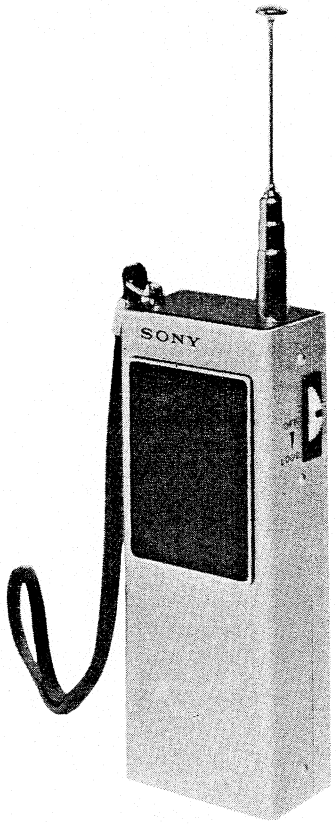
CB-801W



Specifications

Circuit :	Transmitting Section—Crystal Controlled Circuit Receiving Section—6 Transistor Superheterodyne using Crystal Local Oscillator
Semi-conductors :	8 Transistors, 2 Diodes, 1 Thermistor
Antenna System :	Built-in Monopole Telescopic antenna 3'1-3/4"
Frequency :	27,085 Mc (pre-set at the factory)
Input Power to Final Stage :	100 mW (maximum)
Frequency Drift :	±0.005%
Current Drain :	Receiving—7 mA at zero signal Transmitting—20 mA without modulation
Receiver Sensitivity :	4μV (at 50 mW output)
Intermediate Frequency :	455 Kc
Audio Output Power :	160 mW (undistorted) 260 mW (maximum)
Speaker/Microphone :	1-3/4" PM dynamic, 8Ω
Battery :	9 V (006P or a Mercury Battery " Eveready E146 ", " RCA VS 312 " or equivalents)
Dimensions :	2 (W) × 5-1/8 × (H) × 1-1/8" (D)
Weight :	11 ozs.

Adjustment

RECEIVER

☆ Transmitter/Receiver Selector Button ... Receiving position (not pushed)

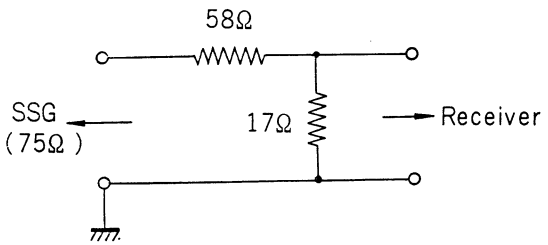
☆ Volume Control ..... Maximum volume position

☆ Telescopic Antenna... Any position

☆ Signal Source..... Use a SSG (Standard Signal Generator) which can deliver RF signals modulated at 30% with 1,000 c/s.

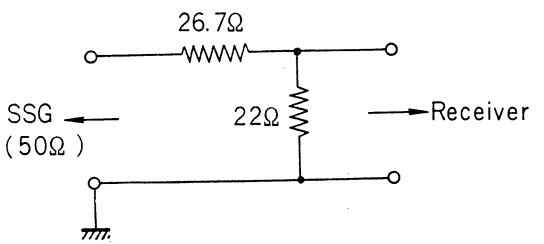
☆ Load for Output..... Connect an 8Ω resistor instead of speaker.

☆ Output Meter ..... Connect across the Load Resistor. (VTVM can be used also.)



(Fig. 1-1)

The Dummy Antenna in case the output impedance of the SSG is 75Ω



(Fig. 1-2)

The Dummy Antenna in case the output impedance of the SSG is 50Ω

(1) Unsolder the telescopic antenna lead (yellow) at the printed circuit board.

(2) Connect the SSG to the copper foil marked with ★ shown in Fig. 3 and ground through the Dummy Antenna as shown in Fig. 1.

(3) Deliver a 27.085 Mc signal from the SSG.

(4) Turn the cores of the Antenna Coil (L_4) and the Receiving Oscillator Coil (L_5) in turn several times until the Output Meter reads maximum.

(5) Solder the telescopic antenna lead to the designated position of the printed circuit board.

TRANSMITTER

☆ Transmitter/Receiver Selector Button ..... Transmitting position (pushed)

☆ Telescopic Antenna ..... Stretch to the full.

☆ Volume Control ..... Minimum volume position

☆ DC Ammeter ..... 20 mA full scale

☆ Field Strength Meter ..... for 27 Mc citizen band

(1) Unsolder the connection between the positions marked with △ and ▲ shown in Fig. 3 and insert the Ammeter between them.

(2) Connect the VTVM between the positions marked with ★ and ☆ shown in Fig. 3.

(3) Turn the cores of the Transmitter Oscillator Coil (L_3) and the Final Output Coil (L_2) clockwise until the oscillation of the set stops and then turn them counter-clockwise by 3 turns.

(4) Adjust the Trimmer Capacitor (C_T) to obtain the minimum reading on the Ammeter.

(5) Adjust the Potentiometer (VR_1) until the Ammeter reads between 8 mA and 11.9 mA.

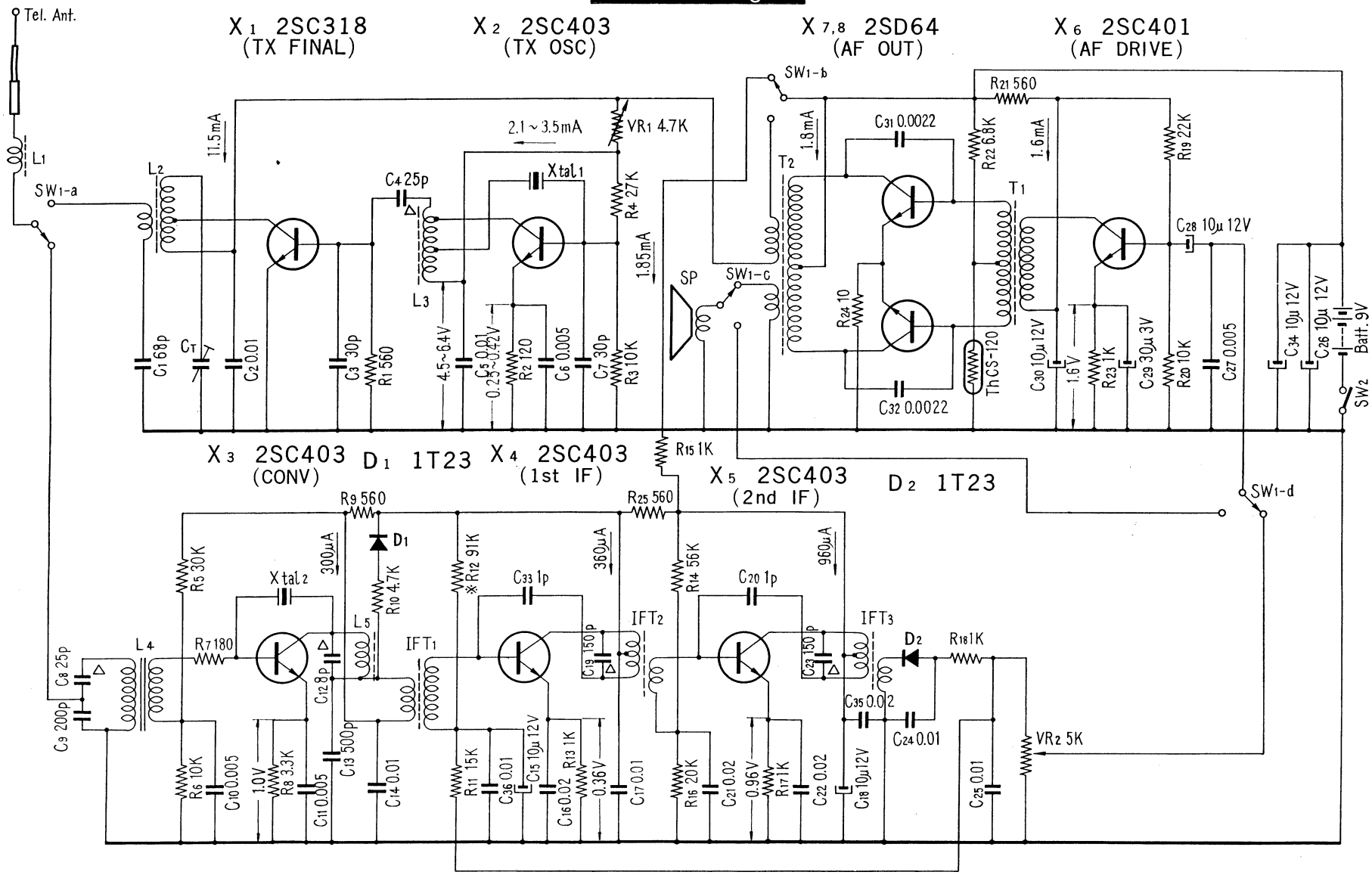
(6) Repeat the above procedures (4) and (5) for several times.

(7) Set the Field Strength Meter at 2 meters away from the Transmitter.

(8) Turn the core of the Loading Coil (L_1) to obtain the maximum reading on the Field Strength Meter.

(9) Be sure that the Ammeter indicates between 8 mA and 11.9 mA. If not, readjust the Potentiometer (VR_1) for the correct reading on the Ammeter.

Schematic Diagram



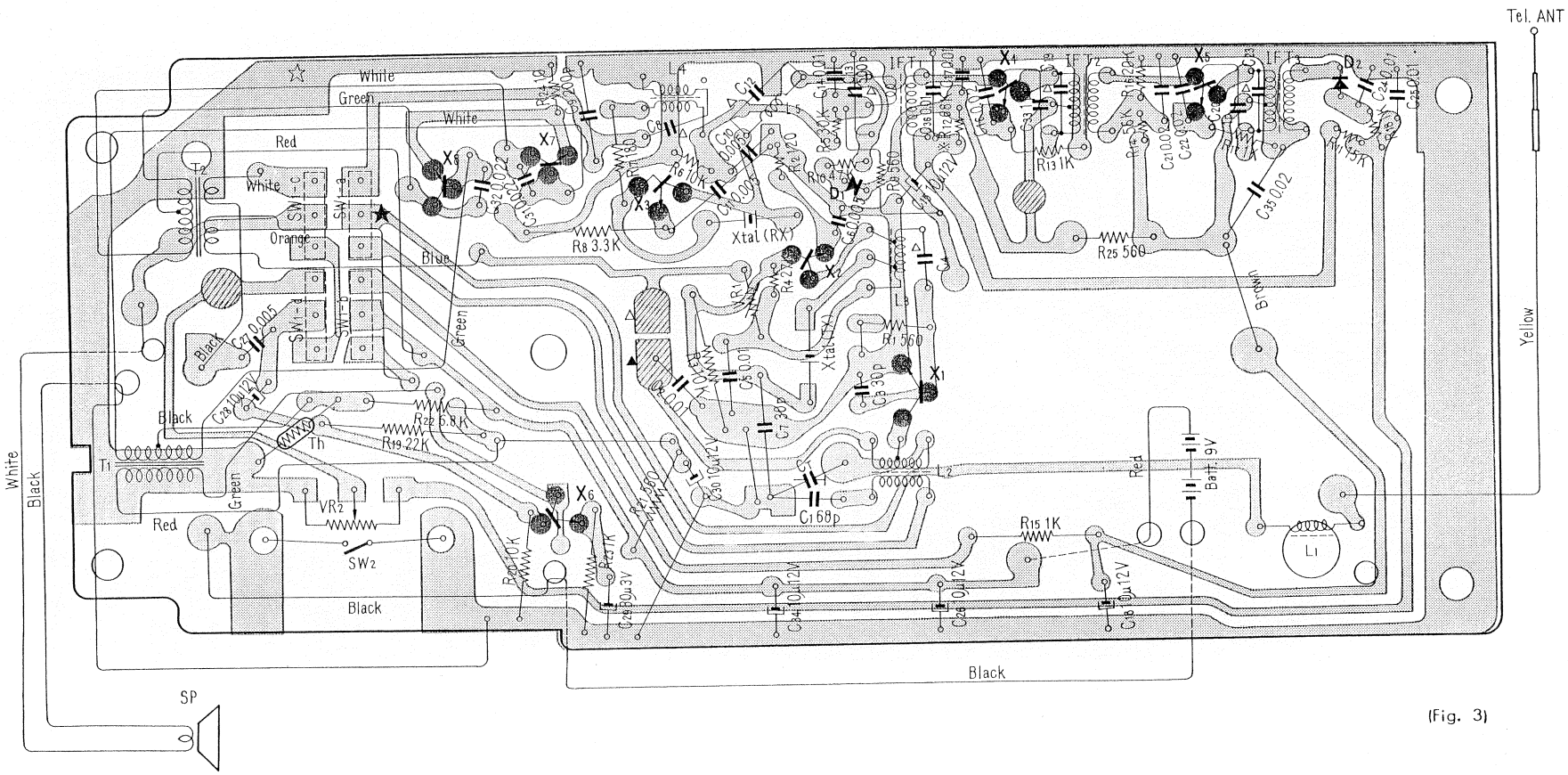
※ To be adjusted

Capacitors marked with △ are built in relative Transformers.

(Fig. 2)

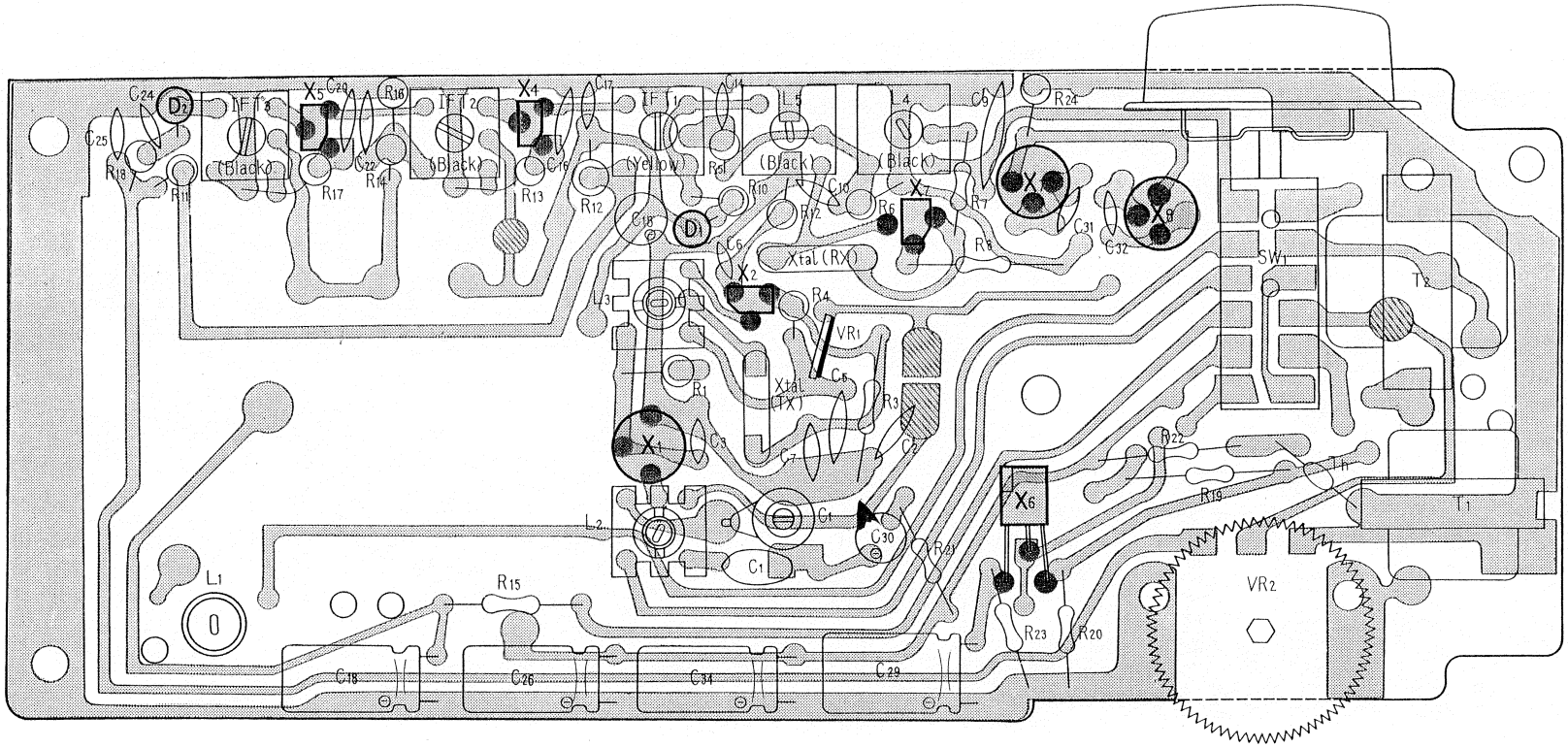
Mounting Diagram

— Printed Side —



Mounting Diagram

– Parts Side –



(Fig. 4)